IN THE CLAIMS:

1. (original) A higher-order moment-based image projection method comprising: when projecting three-dimensional data onto a projection plane, determining a pixel value at a point of intersection of a projection axis and the projection plane based on:

$$P = \left| \left(\sum_{i-1}^{n} Vi / n \right)^{r} - \sum_{i=1}^{n} (Vi / n)^{r} \right|^{1/r},$$

where the number of three-dimensional data values along said projection axis is denoted by n, a data value is denoted by Vi, and a real number greater than one is denoted by r.

2. (original) The higher-order moment-based image projection method of claim 1, wherein $2 \leq r \leq 128$.

3. (original) The higher-order moment-based image projection method of claim 1, wherein an operator is allowed to change r.

4. (original) An image processing apparatus comprising: three-dimensional data storage means for storing three-dimensional data; projection direction specifying means for use by an operator to specify a projection direction; higher-order moment-based image projection means for determining a pixel value at a point of intersection of a projection axis and a projection plane based on:

$$P = \left| \left(\sum_{i-1}^{n} Vi / n \right)^{r} - \sum_{i=1}^{n} (Vi / n)^{r} \right|^{1/r},$$

where the number of three-dimensional data values along said projection axis is denoted by *n*, a data value is denoted by Vi, and a real number greater than one is denoted by *r*; and projection image display means for displaying a projection image.

5. (original) An image processing apparatus comprising: three-dimensional data storage means for storing three-dimensional data; projection direction specifying means for use by an operator to specify a projection direction; higher-order moment-based image projection means for determining a pixel value G at a point of intersection of a projection axis and a projection plane as:

$$G = \left| \left(\sum_{i-1}^{n} Vi/n \right)^{r} - \sum_{i=1}^{n} (Vi/n)^{r} \right|^{1/r},$$

where the number of three-dimensional data values along said projection axis is denoted by *n*, a data value is denoted by Vi, and a real number greater than one is denoted by *r*; and projection image display means for displaying a projection image.

6. (currently amended) The image processing apparatus of claim 4 ~~or claim 5~~, wherein $2 \leq r \leq 128$.

7. (currently amended) The image processing apparatus of claim 4 ~~or claim 5~~, further comprising: order specifying means for use by the operator to specify *r*.

8. (newly added) The image processing apparatus of claim 5, wherein $2 \leq r \leq 128$.

9. (newly added) The image processing apparatus of claim 5, further comprising: order specifying means for use by the operator to specify *r*.

10. (newly added) A higher-order moment-based image projection method comprising: when projecting three-dimensional data onto a projection plane, determining a pixel value at a point of intersection of a projection axis and the projection plane based on:

$$P = \exp\left| \left(\sum_{i-1}^{n} Vi/n \right)^{r} - \sum_{i=1}^{n} (Vi/n)^{r} \right|^{1/r},$$

where the number of three-dimensional data values along said projection axis is denoted by n, a data value is denoted by Vi, and a real number greater than one is denoted by r.

11. (newly added) A higher-order moment-based image projection method comprising: when projecting three-dimensional data onto a projection plane, determining a pixel value at a point of intersection of a projection axis and the projection plane based on:

$$P = \left| \left(\sum_{i-1}^{n} Vi/n \right)^{r} - \sum_{i=1}^{n} (Vi^{r}/n) \right|^{1/r},$$

where the number of three-dimensional data values along said projection axis is denoted by n, a data value is denoted by Vi, and a real number greater than one is denoted by r.

12. (newly added) A higher-order moment-based image projection method comprising: when projecting three-dimensional data onto a projection plane, determining a pixel value at a point of intersection of a projection axis and the projection plane based on:

$$P = \exp\left| \left(\sum_{i-1}^{n} Vi/n \right)^{r} - \sum_{i=1}^{n} (Vi^{r}/n) \right|^{1/r},$$

where the number of three-dimensional data values along said projection axis is denoted by n, a data value is denoted by Vi, and a real number greater than one is denoted by r.